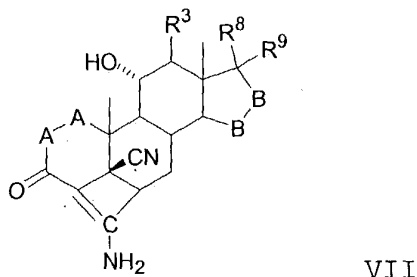


AMENDMENTS TO THE CLAIMS

Claims 1-16. (cancelled).

Claim 17. (currently amended) A process for the preparation of a compound of Formula VII:

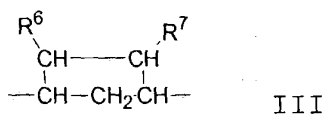


wherein

-A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ,

$\text{R}^3$ ,  $\text{R}^4$  and  $\text{R}^5$  are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an alpha- or beta-oriented group of Formula III:



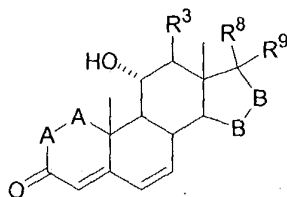
where  $\text{R}^6$  and  $\text{R}^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxyalkyl, acyloxyalkyl, cyano, and aryloxy, and

$\text{R}^8$  and  $\text{R}^9$  are independently selected from the group consisting of hydrogen, hydroxy, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonylalkyl, alkyl, alkoxyalkylalkyl, acyloxyalkyl, cyano, and aryloxy, or  $\text{R}^8$  and  $\text{R}^9$  together comprise a carbocyclic or heterocyclic ring structure, or  $\text{R}^8$  or  $\text{R}^9$  together with  $\text{R}^6$  or  $\text{R}^7$  comprise a

carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring;

the process comprising:

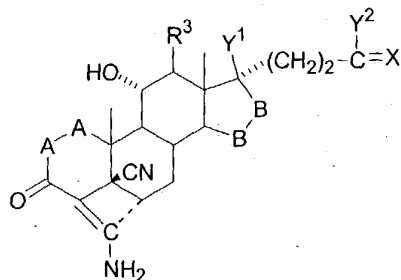
reacting a compound of Formula VIII with a source of cyanide ion in the presence of an alkali metal salt, said compound of Formula VIII having the structure:



VIII

wherein -A-A-,  $R^3$ , -B-B-,  $R^8$ , and  $R^9$  are as defined above.

Claim 18. (currently amended) A process as set forth in claim 17 wherein said compound of Formula VII corresponds to Formula VIIA:

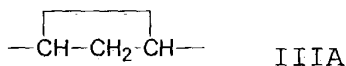


VIIA

wherein:

-A-A- represents the group  $-\text{CH}_2-\text{CH}_2-$  or  $-\text{CH}=\text{CH}-$ ,

-B-B- represents the group  $-\text{CH}_2-\text{CH}_2-$  or an alpha- or beta-oriented group of Formula IIIA:



IIIA

X represents two hydrogen atoms or oxo,

$Y^1$  and  $Y^2$  together represent the oxygen bridge  $-\text{O}-$ , or

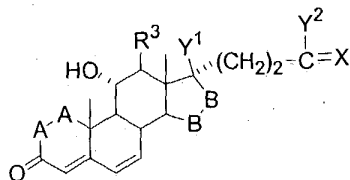
$Y^1$  represents hydroxy, and

$Y^2$  represents hydroxy, lower alkoxy or, if X represents  $\text{H}_2$ , also lower alkanoyloxy,

and salts of compounds in which X represents oxo and Y<sup>2</sup> represents hydroxy,

the process comprising:

reacting a cyanide source such as ketone cyanohydrin in the presence of LiCl in the presence of a base with an 11 $\alpha$ -hydroxy compound corresponding to the formula:



VIII A

wherein -A-A-, -B-B-, Y<sup>1</sup>, Y<sup>2</sup>, and X are as defined in Formula VIIA.

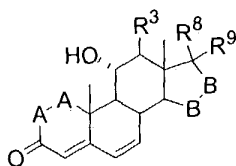
Claim 19. (original) A process as set forth in claim 17 wherein said compound of Formula VII is 5'R(5' $\alpha$ ),7' $\beta$ -20'-

Aminohexadecahydro-11' $\beta$ -hydroxy-10' $\alpha$ ,13' $\alpha$ -dimethyl-3',5-dioxospiro[furan-2(3H),17' $\alpha$ (5'H) -

[7,4]metheno[4H]cyclopenta[a]phenanthrene]-5'-carbonitrile and said compound of Formula VIII is 11 $\alpha$ ,17 $\alpha$ -Dihydroxy-3-oxopregna-4,6-diene-21-carboxylic Acid,  $\gamma$ -Lactone.

Claim 20. (original) A process as set forth in claim 17 wherein said source of cyanide ion comprises an alkali metal cyanide, the reaction between said compound of Formula VIII and cyanide ion being carried out in the presence of an acid and water.

Claim 21. (currently amended) A process for the preparation of a compound of Formula VIII



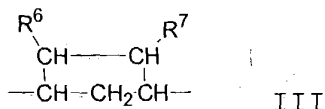
VIII

wherein

-A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ,

R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

-B-B- represents the group -CHR<sup>6</sup>-CHR<sup>7</sup>- or an alpha- or beta-oriented group of Formula III:

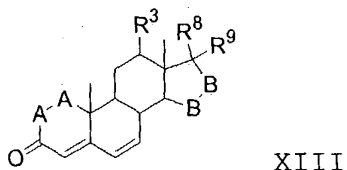


where R<sup>6</sup> and R<sup>7</sup> are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano, and aryloxy, and

R<sup>8</sup> and R<sup>9</sup> are independently selected from the group consisting of hydrogen, hydroxy, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonylalkyl, ~~alkyl~~, alkoxycarbonylalkyl, acyloxyalkyl, cyano, and aryloxy, or R<sup>8</sup> and R<sup>9</sup> together comprise a carbocyclic or heterocyclic ring structure, or R<sup>8</sup> or R<sup>9</sup> together with R<sup>6</sup> or R<sup>7</sup> comprise a carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring;

the process comprising:

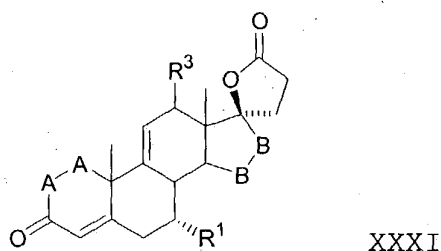
oxidizing a substrate compound corresponding to Formula X by fermentation in the presence of a microorganism effective for introducing an 11-hydroxy group into said substrate in  $\alpha$ -orientation, said substrate corresponding to the formula:



wherein -A-A-,  $R^2$ ,  $R^3$ , -B-B-,  $R^8$ , and  $R^9$  are as defined above.

Claim 22. (original) A process as set forth in claim 21 wherein said compound of Formula VIII is  $11\alpha, 17\alpha$ -Dihydroxy-3-oxopregna-4,6-diene-21-carboxylic Acid,  $\gamma$ -Lactone.

Claim 23. (currently amended) A process for the preparation of a mexrenone derivative corresponding to the formula:



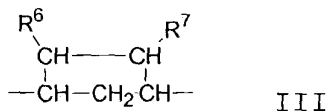
wherein

-A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ,

$R^3$ ,  $R^4$  and  $R^5$  are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

$R^1$  represents an alpha-oriented lower alkoxycarbonyl or hydroxycarbonyl radical,

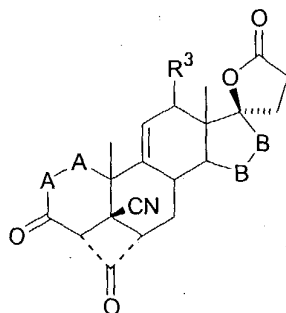
-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an alpha- or beta-oriented group of Formula III:



where  $R^6$  and  $R^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano, and aryloxy,

the process comprising:

reacting a compound of Formula XIV with an alkali metal alkoxide corresponding to the formula  $R^{10}OM$  wherein M is alkali metal and  $R^{10}O^-$  corresponds to the alkoxy substituent of  $R^1$ , said compound of Formula XIV having the structure:

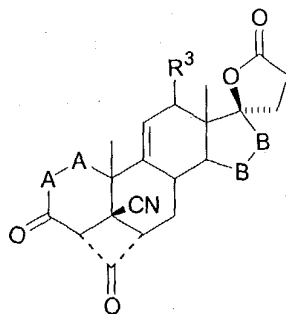


XIV

wherein -A-A-,  $R^3$ , and -B-B-, are as defined above.

Claim 24. (original) A process as set forth in claim 23 wherein said compound of Formula XIV is 4'S(4'α),7'α-1',2',3',4,4',5,5',6',7',8',10',12',13',14',15',16'-hexadecahydro-10β-,13'β-dimethyl-3',5,20'-trioxospiro[furan-2(3H),17'β-[4,7]methano[17H]cyclopenta[a]phenanthrene]5'-carbonitrile.

Claim 25. (currently amended) A process for the preparation of a compound of Formula XIV:



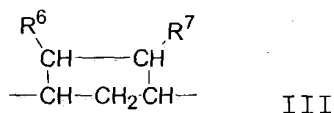
XIV

wherein

-A-A- represents the group  $-CHR^4-CHR^5-$  or  $-CR^4=CR^5-$

$R^3$ ,  $R^4$  and  $R^5$  are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

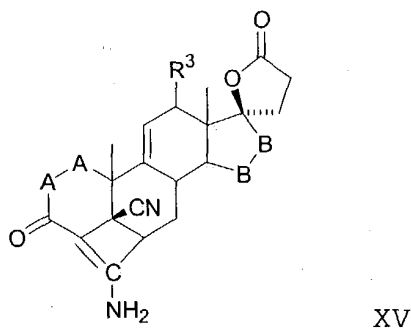
-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an alpha- or beta-oriented group of Formula III:



where  $R^6$  and  $R^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano, and aryloxy,

the process comprising:

hydrolyzing a compound corresponding to Formula XV:

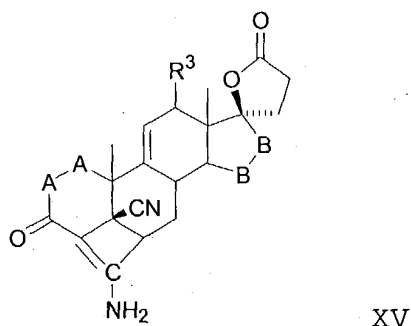


wherein -A-A-,  $R^3$ , and -B-B- are as defined above.

Claim 26. (original) A process as set forth in claim 25 wherein said compound of Formula XIV is 4'S(4'α),7'α-1',2',3',4,4',5,5',6',7',8',10',12',13',14',15',16'-hexadecahydro-10β-,13'β-dimethyl-3',5,20'-trioxospiro[furan-2(3H),17'β-[4,7]methano[17H]cyclopenta[a]phenanthrene]5'-carbonitrile and said compound of Formula XV is 5'R(5'α),7'β-20'-amino-1',2',3',4,5,6',7',8',10',12',13',14',15',16'-tetradecahydro-10'α,13'α-dimethyl-3',5-dioxospiro[furan-

2(3H),17' $\alpha$ (5'H) - [7,4]metheno[4H]cyclopenta[a]phenanthrene]-5'-carbonitrile.

Claim 27. (currently amended) A process for the preparation of a compound corresponding to Formula XV:

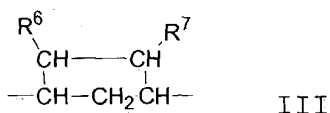


wherein

-A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ,

$\text{R}^3$ ,  $\text{R}^4$  and  $\text{R}^5$  are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an  $\alpha$ - or  $\beta$ -oriented group of Formula III:

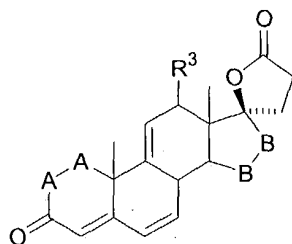


where  $\text{R}^6$  and  $\text{R}^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano, and aryloxy,

the process comprising:

reacting a compound of Formula XVI with a source of cyanide ion in the presence of an alkali metal salt, said compound of Formula XVI having the structure:



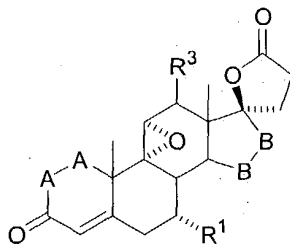


XVI

wherein -A-A-,  $R^3$ , and -B-B- are as defined above.

Claim 28. (original) A process as set forth in claim 27 wherein said compound of Formula XV is Methyl Hydrogen  $9\alpha,17\alpha$ -dihydroxy-3-oxopregn-4-ene- $7\alpha,21$ -dicarboxylate,  $\gamma$ -lactone.

Claim 29. (currently amended) A process for the preparation of a compound corresponding to the formula:



XXXII

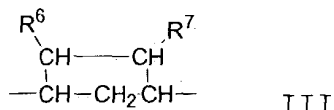
wherein

-A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ,

$R^3$ ,  $R^4$  and  $R^5$  are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

$R^1$  represents an alpha-oriented lower alkoxycarbonyl or hydroxycarbonyl radical,

-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an alpha- or beta-oriented group of Formula III:



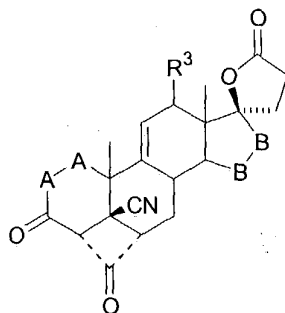
III

where  $R^6$  and  $R^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl,

alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl,  
acyloxyalkyl, cyano, and aryloxy,

the process comprising:

reacting a compound of Formula XXI with an alkali metal  
alkoxide corresponding to the formula  $R^{10}OM$  wherein M is alkali  
metal and  $R^{10}O^-$  corresponds to the alkoxy substituent of  $R^1$ , said  
compound of Formula XXI having the structure:

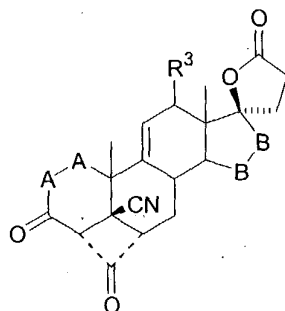


XXI

wherein -A-A-  $R^1$ ,  $R^3$ , and -B-B- are as defined above.

Claim 30. (original) A process as set forth in claim 29 wherein  
said compound of Formula XXI is 4'S(4' $\alpha$ ), 7' $\alpha$ -9', 11 $\alpha$ -  
epoxyhexadecahydro-10 $\beta$ -, 13' $\beta$ -dimethyl-3'5, 20'-trioxospiro[furan-  
2 (3H), 17' $\beta$ - [4, 7]methano [17H]cyclopenta [a]phenanthrene-5'-  
carbonitrile.

Claim 31. (currently amended) A process for the preparation of a  
compound corresponding to Formula XXI:



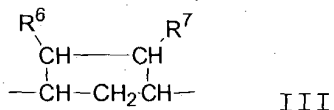
XXI

wherein

-A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ,

$\text{R}^3$ ,  $\text{R}^4$  and  $\text{R}^5$  are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

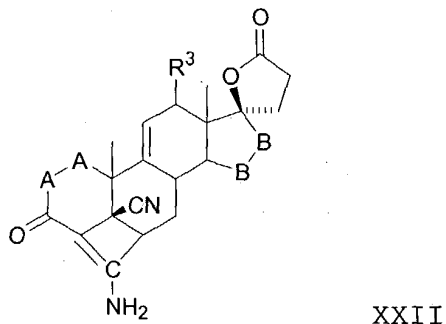
-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an alpha- or beta-oriented group of Formula III:



where  $\text{R}^6$  and  $\text{R}^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano, and aryloxy,

the process comprising:

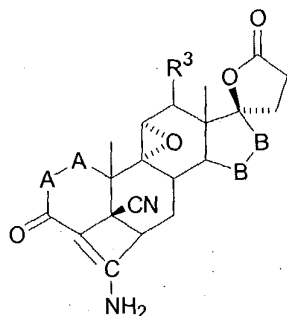
hydrolyzing a compound corresponding to Formula XXII:



wherein -A-A-,  $\text{R}^3$ , and -B-B- are as defined above.

Claim 32. (original) A process as set forth in claim 31 wherein said compound of Formula XXI is 4'S(4'α),7'α-9',11α-epoxyhexadecahydro-10β-,13'β-dimethyl-3'5,20'-trioxospiro[furan-2(3H),17'β-[4,7]methano[17H]cyclopenta[a]phenanthrene-5'-carbonitrile and said compound of Formula XXII is 5'R(5'α),7'β-20'-amino-9,11β-epoxyhexadecahydro-10',13'-dimethyl-3',5-dioxospiro[furan-2(3H),17'a(5'H)-[7,4]methene[4H]cyclopenta[a]phenanthrene-5'-carbonitrile.

Claim 33. (currently amended) A process for the preparation of a compound corresponding to Formula XXII:



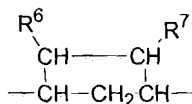
XXII

wherein

-A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ,

$\text{R}^3$ ,  $\text{R}^4$  and  $\text{R}^5$  are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an alpha- or beta-oriented group of Formula III:

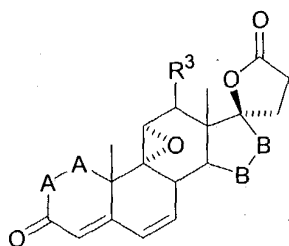


III

where  $\text{R}^6$  and  $\text{R}^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano, and aryloxy,

the process comprising:

reacting a compound of Formula XXIII with a source of cyanide ion in the presence of an alkali metal salt, said compound of Formula ~~VIII~~ XXIII having the structure:

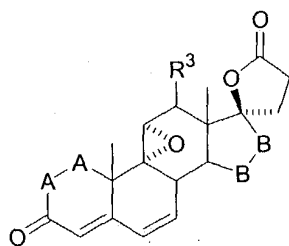


XXIII

wherein -A-A-,  $R^3$ , and -B-B- are as defined above.

Claim 34. (currently amended) A process as set forth in claim 33 wherein said compound of Formula XXII is 5'R(5' $\alpha$ ),7' $\beta$ -20'-amino-9,11 $\beta$ -epoxyhexadecahydro-10',13'-dimethyl-3',5-dioxospiro[furan-2(3H),17'a(5'H)-[7,4]methene[4H]cyclopenta[a]phenanthrene-5'-carbonitrile and said compound of Formula XXIII is 9,11 $\alpha$ -epoxy-17 $\alpha$ -hydroxy-3-oxopregna-4,6-diene-21-carboxylic acid,  $\gamma$ -lactone.

Claim 35. (currently amended) A process for the preparation of a compound corresponding to Formula XXIII:



XXIII

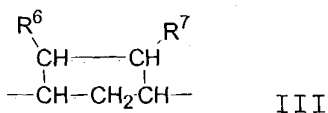
wherein

-A-A- represents the group -CHR<sup>4</sup>-CHR<sup>5</sup>- or -CR<sup>4</sup>=CR<sup>5</sup>-,

$R^3$ ,  $R^4$  and  $R^5$  are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

$R^1$  represents an alpha-oriented lower alkoxy carbonyl radical,

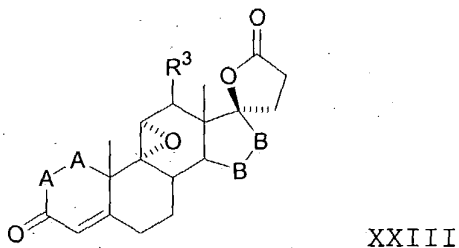
-B-B- represents the group -CHR<sup>6</sup>-CHR<sup>7</sup>- or an alpha- or beta-oriented group of Formula III:



where  $\text{R}^6$  and  $\text{R}^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano, and aryloxy,

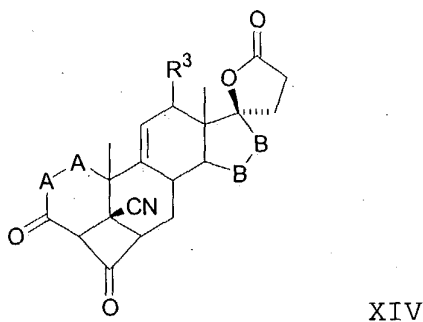
the process comprising:

abstracting hydrogen from the 6 and 7 positions of a compound corresponding to the formula:



wherein -A-A-,  $\text{R}^3$ , and -B-B- are as defined above.

Claim 36. (currently amended) A process for the preparation of a compound of Formula XIV:

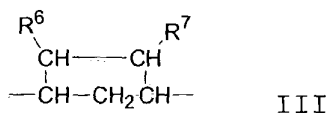


wherein

-A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ,

$\text{R}^3$ ,  $\text{R}^4$  and  $\text{R}^5$  are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

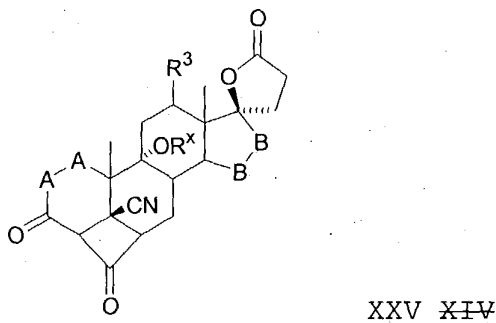
-B-B- represents the group -CHR<sup>6</sup>-CHR<sup>7</sup>- or an alpha- or beta-oriented group of Formula III:



where R<sup>6</sup> and R<sup>7</sup> are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano, and aryloxy,

the process comprising:

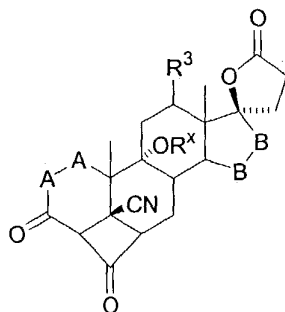
hydrolyzing a compound corresponding to Formula XXV:



wherein R<sup>x</sup> is a hydroxyl protecting group and  
wherein -A-A-, R<sup>3</sup>, and -B-B-, ~~R<sup>8</sup>~~, and ~~R<sup>9</sup>~~ are as defined above.

Claim 37. (original) A process as set forth in claim 36 wherein said compound of Formula XIV is 4'S(4'α),7'α-1',2',3',4,4',5,5',6',7',8',10',12',13',14',15',16'-hexadecahydro-10β-,13'β-dimethyl-3',5,20'-trioxospiro[furan-2(3H),17'β-[4,7]methano[17H]cyclopenta[a]phenanthrene]5'-carbonitrile and said compound of Formula XXV is 5'R(5'α),7'β-20'-aminohexadecahydro-9'β-hydroxy-10'a,13'α-dimethyl-3',5-dioxospiro[furan-2(3H),17'α(5'H)-[7,4]metheno[4H]cyclopenta[a]phenanthrene]-5'-carbonitrile.

Claim 38. (currently amended) A process for the preparation of a compound corresponding to Formula XXV:



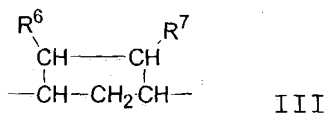
XXV

wherein

-A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ,

$\text{R}^3$ ,  $\text{R}^4$  and  $\text{R}^5$  are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an alpha- or beta-oriented group of Formula III:



III

where  $\text{R}^6$  and  $\text{R}^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano, and aryloxy, and

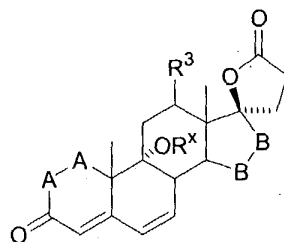
~~$\text{R}^8$  and  $\text{R}^9$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano, aryloxy, or  $\text{R}^8$  and  $\text{R}^9$  together comprise a carbocyclic or heterocyclic ring structure, or  $\text{R}^8$  or  $\text{R}^9$  together with  $\text{R}^6$  or  $\text{R}^7$  comprise a carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring,~~

where  $\text{R}^x$  is a hydroxy protecting group,

the process comprising:



reacting a compound of Formula XXVI with a source of cyanide ion in the presence of an alkali metal salt, said compound of Formula XXVI having the structure:

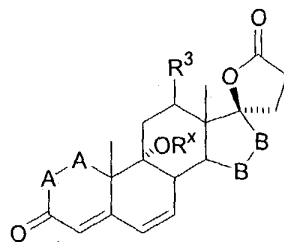


XXVI

wherein -A-A-,  $R^3$ , and -B-B- are as defined above.

Claim 39. (original) A process as set forth in claim 38 wherein said compound of Formula XXV is 5'R(5' $\alpha$ ), 7' $\beta$ -20'-aminohexadecahydro-9' $\beta$ -hydroxy-10'a, 13' $\alpha$ -dimethyl-3', 5'-dioxospiro[furan-2(3H), 17' $\alpha$ (5'H)-[7,4]metheno[4H]cyclopenta[a]phenanthrene]-5'-carbonitrile and said compound of Formula XXVI is 9 $\alpha$ , 17 $\alpha$ -dihydroxy-3-oxopregna-4,6-diene-21-carboxylic acid,  $\gamma$ -lactone.

Claim 40. (currently amended) A process for the preparation of a compound corresponding to Formula XXVI:



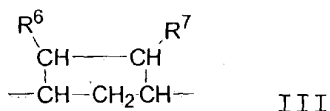
XXVI

wherein

-A-A- represents the group -CHR<sup>4</sup>-CHR<sup>5</sup>- or -CR<sup>4</sup>=CR<sup>5</sup>-,

$R^3$ ,  $R^4$  and  $R^5$  are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an alpha- or beta-oriented group of Formula III:

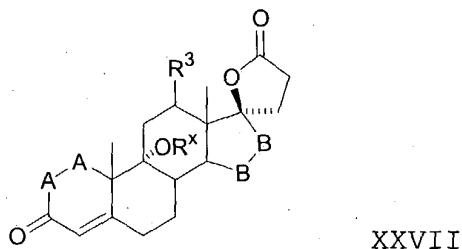


where  $\text{R}^6$  and  $\text{R}^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano, and aryloxy,

where  $\text{R}^x$  is a hydroxy protecting group,

the process comprising:

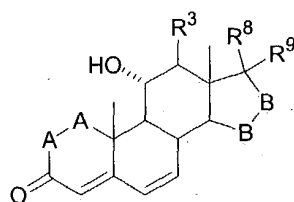
abstracting hydrogens from the 6 and 7 positions  
(dehydrogenation) of a compound corresponding to the formula:



wherein -A-A-,  $\text{R}^3$ , and -B-B- are as defined above.

Claim 41. (original) A process as set forth in claim 40 wherein said compound of Formula XXVI is  $9\alpha, 17\alpha$ -dihydroxy-3-oxopregna-4,6-diene-21-carboxylic acid,  $\gamma$ -lactone and said compound of Formula XXVII is  $9\alpha, 17\alpha$ -dihydroxy-3-oxopregn-4-ene-21-carboxylic acid,  $\gamma$ -lactone.

Claim 42. (currently amended) A process for the preparation of a compound corresponding to Formula VIII:



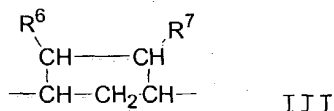
VIII

wherein

-A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ,

$\text{R}^3$ ,  $\text{R}^4$  and  $\text{R}^5$  are independently ~~is~~ selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an alpha- or beta-oriented group of Formula III:



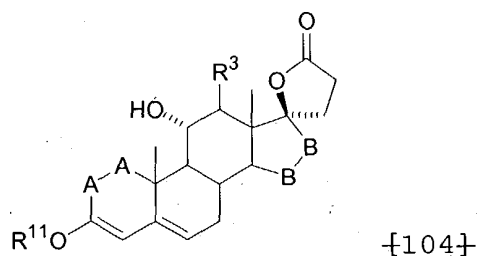
III

where  $\text{R}^6$  and  $\text{R}^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano, and aryloxy, and

$\text{R}^8$  and  $\text{R}^9$  are independently selected from the group consisting of hydrogen, hydroxy, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonylalkyl, ~~alkyl~~, alkoxycarbonylalkyl, acyloxyalkyl, cyano, and aryloxy, or  $\text{R}^8$  and  $\text{R}^9$  together comprise a carbocyclic or heterocyclic ring structure, or  $\text{R}^8$  or  $\text{R}^9$  together with  $\text{R}^6$  or  $\text{R}^7$  comprise a carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring;

the process comprising:

oxidizing a compound of Formula corresponding to Formula 104



wherein -A-A-,  $R^3$ , and -B-B- are as defined above and  $R^{11}$  is a  $C_1$  to  $C_4$  alkyl.

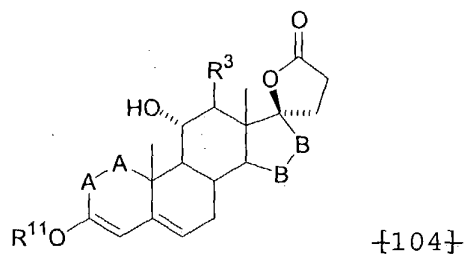
Claim 43. (original) A process as set forth in claim 42 wherein the compound of Formula VIII is contacted with an oxidizing agent.

Claim 44. (original) A process as set forth in claim 43 wherein said oxidizing agent is a benzoquinone derivative.

Claim 45. (original) A process as set forth in claim 44 wherein said oxidizing agent is selected from the group consisting of 2,3,-dichloro-5,6-dicyano-1,4-benzoquinone and tetrachlorobenzoquinone.

Claim 46. (original) A process as set forth in claim 42 wherein said compound of Formula 104 is contacted with a halogenating agent to produce a halogenated intermediate; and contacting said halogenated intermediate with a dehydrohalogenating agent to dehydrohalogenate said halogenated intermediate and form said compound of Formula 104.

Claim 47. (currently amended) A process for the preparation of a compound corresponding to Formula 104:



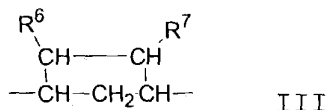
wherein

-A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ,

$\text{R}^3$ ,  $\text{R}^4$  and  $\text{R}^5$  are independently ~~is~~ selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

$\text{R}^{11}$  is  $\text{C}_1$  to  $\text{C}_4$  lower alkyl;

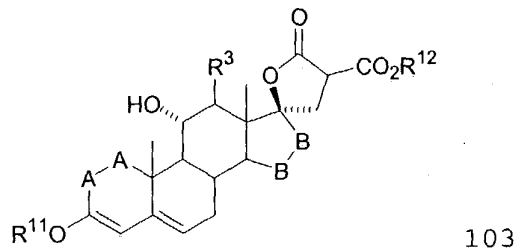
-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an alpha- or beta-oriented group of Formula III:



where  $\text{R}^6$  and  $\text{R}^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano, and aryloxy,

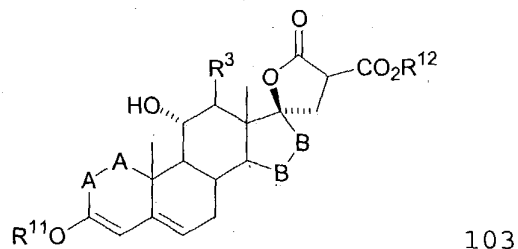
the process comprising:

thermally decomposing a compound corresponding to Formula 103 in the presence of an alkali metal halide, said compound of Formula 103 having the structure:



wherein -A-A-,  $\text{R}^3$ ,  $\text{R}^{11}$ , and -B-B- are as defined above and  $\text{R}^{12}$  is  $\text{C}_1$ - $\text{C}_4$  alkyl.

Claim 48. (currently amended) A process for the preparation of a compound corresponding to Formula 103:



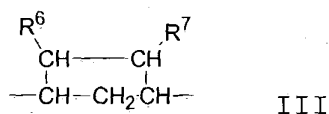
wherein

-A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ,

$\text{R}^3$ ,  $\text{R}^4$  and  $\text{R}^5$  are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

$\text{R}^{11}$  is  $\text{C}_1$ - $\text{C}_4$  lower alkyl;

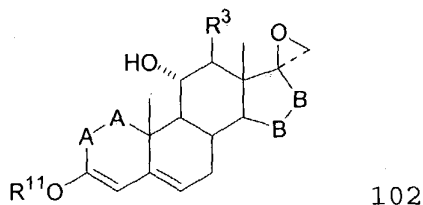
-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an alpha- or beta-oriented group of Formula III:



where  $\text{R}^6$  and  $\text{R}^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano, and aryloxy,

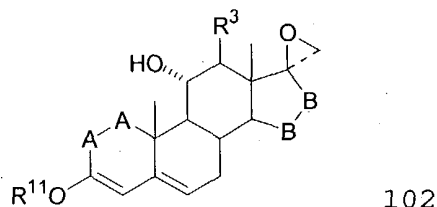
the process comprising:

condensing a compound of Formula 102 with a dialkyl malonate in the presence of a base, said compound of Formula 102 having the structure:



wherein -A-A-,  $\text{R}^3$ ,  $\text{R}^{11}$ , and -B-B- are as defined above.

Claim 49. (currently amended) A process for the preparation of a compound corresponding to Formula 102:



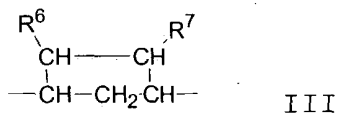
wherein

-A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ,

$\text{R}^3$ ,  $\text{R}^4$  and  $\text{R}^5$  are independently ~~is~~ selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

$\text{R}^{11}$  is  $\text{C}_1$  to  $\text{C}_4$  alkyl;

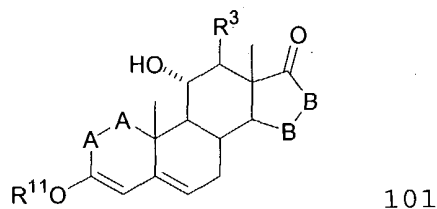
-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an alpha- or beta-oriented group of Formula III:



where  $\text{R}^6$  and  $\text{R}^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxyalkyl, acyloxyalkyl, cyano, and aryloxy,

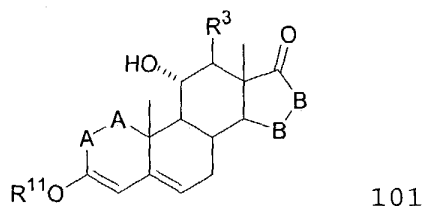
the process comprising:

reacting a compound of Formula 101 with a sulfonium ylide in the presence of a base, said compound of Formula 101 having the structure:



wherein -A-A-,  $\text{R}^3$ , and -B-B- are as defined above.

Claim 50. (currently amended) A process for the preparation of a compound corresponding to Formula 101:



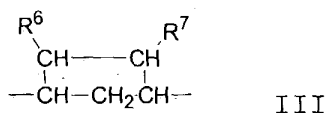
wherein

-A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ,

$\text{R}^3$ ,  $\text{R}^4$  and  $\text{R}^5$  are independently ~~is~~ selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

$\text{R}^{11}$  is  $\text{C}_1$ - $\text{C}_4$  alkyl;

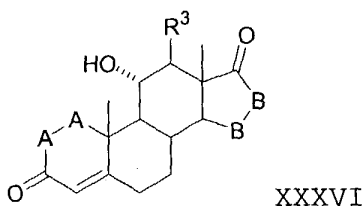
-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an alpha- or beta-oriented group of Formula III:



where  $\text{R}^6$  and  $\text{R}^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano, and aryloxy,

the process comprising:

reacting a compound of Formula XXXVI with an etherifying reagent in the presence of an acid catalyst, said compound of Formula XXXVI having the structure:

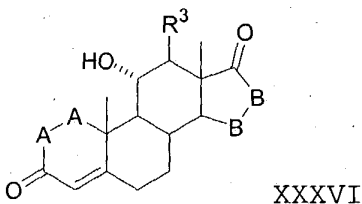


wherein -A-A-,  $\text{R}^3$ , and -B-B- are as defined above.



Claim 51. (original) A process as set forth in claim 50 wherein said compound of Formula 101 prepared by reacting a compound of Formula XXXVI with a trialkyl orthoformate in an acidified alkanol solvent.

Claim 52. (currently amended) A process for the preparation of a compound of Formula XXXVI

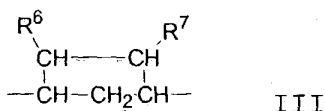


wherein

-A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ,

$\text{R}^3$ ,  $\text{R}^4$  and  $\text{R}^5$  are independently ~~is~~ selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

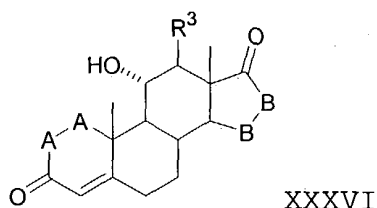
-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an alpha- or beta-oriented group of Formula III:



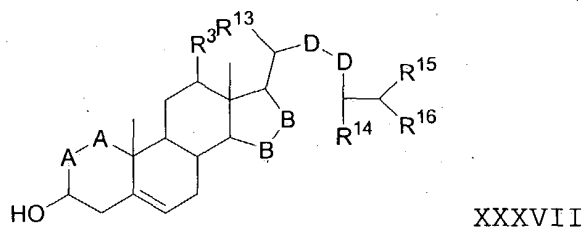
where  $\text{R}^6$  and  $\text{R}^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano, and aryloxy,

the process comprising:

oxidizing a substrate compound of Formula XXXVII by fermentation in the presence of a microorganism effective for conversion of said substrate compound to a compound of Formula XXXVI

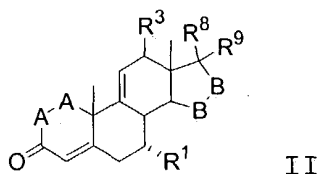


where -A-A-, -B-B- and  $R^3$  are as defined above, said substrate compound of Formula XXXVII corresponding to the Formula:



wherein -A-A-,  $R^1$ ,  $R^3$ , -B-B-, and are as defined above and D-D is  $-\text{CH}_2-\text{CH}_2-$  or  $-\text{CH}=\text{CH}-$  and  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ , and  $R^{16}$  are independently selected from the group consisting of  $\text{C}_1\text{-C}_4$  alkyl; and thereafter introducing an 11-hydroxy group into said  $\alpha$ -orientation in said compound of Formula XXXVI by fermentation in the presence of a microorganism effective for the  $11\alpha$ -hydroxylation.

Claim 53. (currently amended) A process for the preparation of a compound corresponding to Formula II:



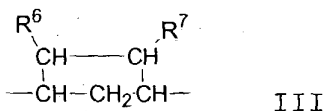
wherein:

-A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ,

$R^3$ ,  $R^4$  and  $R^5$  are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, and aryloxy,

$R^1$  represents an alpha-oriented lower alkoxy-carbonyl or hydroxycarbonyl radical,

-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an alpha- or beta-oriented group of Formula III:

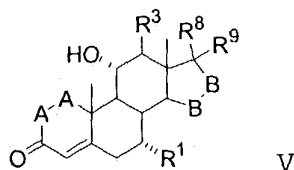


where  $R^6$  and  $R^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy-carbonyl, acyloxyalkyl, cyano, and aryloxy, and

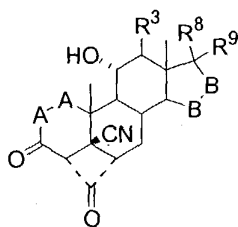
$R^8$  and  $R^9$  are independently selected from the group consisting of hydrogen, hydroxy, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonylalkyl, ~~alkyl~~, alkoxy-carbonylalkyl, acyloxyalkyl, cyano, and aryloxy, or  $R^8$  and  $R^9$  together comprise a carbocyclic or heterocyclic ring structure, or  $R^8$  or  $R^9$  together with  $R^6$  or  $R^7$  comprise a carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring;

the process comprising:

preparing a compound of Formula V

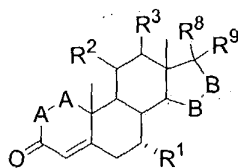


wherein -A-A-,  $R^1$ ,  $R^3$ , -B-B-,  $R^8$ , and  $R^9$  are as defined above by reacting a compound of Formula VI with an alkali metal alkoxide corresponding to the formula  $R^{10}\text{OM}$  wherein M is alkali metal and  $R^{10}\text{O}-$  corresponds to the alkoxy substituent of  $R^1$ , said compound of Formula VI having the structure:



VI

wherein -A-A-,  $R^3$ , -B-B-,  $R^8$ , and  $R^9$  are as defined above;  
without isolating said compound of Formula V in purified  
form, reacting said compound of Formula V with a lower  
alkylsulfonylating or acylating reagent to produce a compound of  
Formula IV

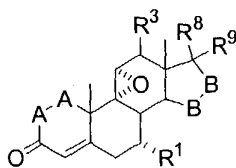


IV

wherein -A-A-,  $R^1$ ,  $R^3$ , -B-B-,  $R^8$ , and  $R^9$  are as defined  
above, and  $R^2$  is alkylsulfonyloxy, acyloxy leaving group or  
halide;

without isolating said compound of Formula IV in purified  
form, removing the  $11\alpha$ -leaving group therefrom by reaction with a  
reagent for abstraction thereof to produce said compound of  
Formula II.

Claim 54. (original) A process as set forth in claim 53 wherein,  
without isolating said compound of Formula II in purified form,  
said compound of Formula II is reacted with an epoxidizing  
reagent to form a product of Formula I



I

wherein -A-A-,  $R^1$ ,  $R^3$ , -B-B-,  $R^8$ , and  $R^9$  are as defined  
above.

Claim 55. (original) A process as set forth in claim 54 wherein:

said compound of Formula II is formed by reaction of said compound of Formula IV with a leaving group removing reagent comprising an alkanoic acid in the presence of an alkali metal alkoxide;

volatile components are stripped from the reaction solution; water-soluble components of the reaction solution are removed by washing with an aqueous washing solution, thereby producing residual Formula II solution suitable for conversion of the compound of Formula II to a compound of Formula I; and

a peroxide oxidizing agent is combined with the residual Formula II solution to effect the conversion of the compound of Formula II to the compound of Formula I.

Claim 56. (original) A process as set forth in claim 54 wherein:

said compound of Formula V is formed by reaction of said compound of Formula VI with an alkali metal alkoxide in an organic solvent;

the compound of Formula V is extracted from a solution comprising the Formula V reaction solution using an organic solvent, thereby producing a Formula V extract solution; and

a lower alkylsulfonyl halide or acyl halide is introduced into a solution comprising said Formula V extract solution for preparation of the compound of Formula VI.

Claim 57. (original) A process as set forth in claim 54 wherein:

said compound of Formula IV is formed by reaction of said compound of Formula V with a leaving group abstraction reagent in an organic solvent;

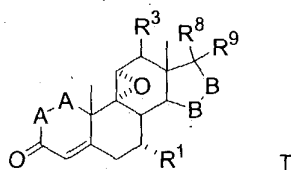
a solution comprising the Formula IV reaction solution is passed over an acidic and then a basic exchange resin column for

the removal of basic and acidic impurities therefrom, thereby producing Formula IV eluate solution; and

a reagent for abstraction of an alkylsulfonyloxy or acyloxy leaving group is combined with a solution comprising said Formula IV eluate solution for preparation of said compound of Formula II.

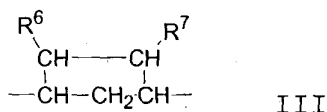
Claims 58-65. (cancelled).

Claim 66. (new) A process for the formation of a compound of Formula I:



wherein -A-A- represents the group  $-\text{CHR}^4-\text{CHR}^5-$  or  $-\text{CR}^4=\text{CR}^5-$ ;

-B-B- represents the group  $-\text{CHR}^6-\text{CHR}^7-$  or an alpha- or beta-oriented group of Formula III:



$\text{R}^1$  represents an  $\alpha$ -oriented lower alkoxy carbonyl or hydroxycarbonyl radical;

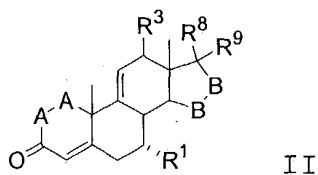
$\text{R}^3$ ,  $\text{R}^4$  and  $\text{R}^5$  are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxy carbonyl, cyano, and aryloxy;

$\text{R}^6$  and  $\text{R}^7$  are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxy carbonyl, acyloxyalkyl, cyano, and aryloxy; and

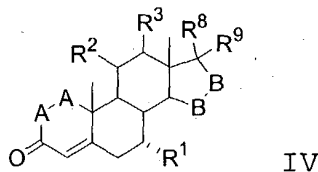
$\text{R}^8$  and  $\text{R}^9$  are independently selected from the group consisting of hydrogen, hydroxy, halo, lower alkoxy, acyl,

hydroxyalkyl, alkoxyalkyl, hydroxycarbonylalkyl, alkoxycarbonylalkyl, acyloxyalkyl, cyano, and aryloxy, or  $R^8$  and  $R^9$  together comprise a carbocyclic or heterocyclic ring structure, or  $R^8$  or  $R^9$  together with  $R^6$  or  $R^7$  comprise a carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring;

the process comprising contacting an epoxidizing reagent with a compound of Formula II:

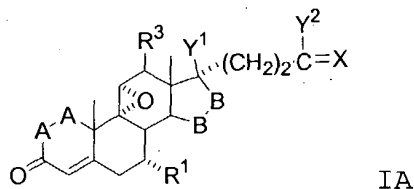


wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ ,  $R^8$  and  $R^9$  are as defined above;  
wherein said compound of Formula II is prepared by removing an  $11\alpha$ -leaving group from a compound of Formula IV:

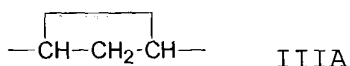


wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ ,  $R^8$  and  $R^9$  are as defined above, and  $R^2$  is a leaving group the abstraction of which is effective for generating a double bond between the 9- and 11-carbon atoms.

Claim 67. (new) A process as set forth in claim 66 wherein said compound of Formula I corresponds to Formula IA:



wherein -A-A- represents the group  $-\text{CH}_2-\text{CH}_2-$  or  $-\text{CH}=\text{CH}-$ ;  
-B-B- represents the group  $-\text{CH}_2-\text{CH}_2-$  or an alpha- or beta-oriented group of Formula IIIA:



R<sup>1</sup> represents an alpha-oriented lower alkoxy carbonyl radical;

X represents two hydrogen atoms or oxo;

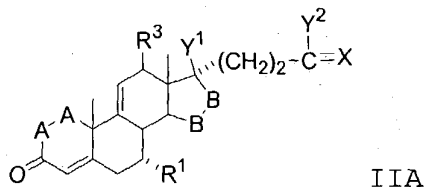
Y<sup>1</sup> and Y<sup>2</sup> together represent the oxygen bridge -O-, or

Y<sup>1</sup> represents hydroxy, and

Y<sup>2</sup> represents hydroxy, lower alkoxy or, if X represents H<sub>2</sub>, also lower alkanoyloxy;

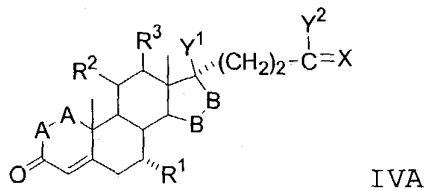
and salts of compounds in which X represents oxo and Y<sup>2</sup> represents hydroxy;

the process comprising contacting an epoxidizing reagent with a compound of Formula IIA:



wherein -A-A-, -B-B-, R<sup>1</sup>, R<sup>3</sup>, X, Y<sup>1</sup> and Y<sup>2</sup> are as defined above;

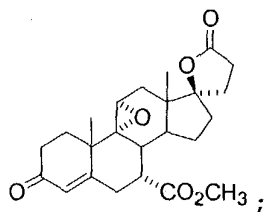
wherein said compound of Formula IIA is formed by contacting a solution comprising a lower alkanolic acid and a salt of a lower alkanolic acid with a compound of Formula IVA:



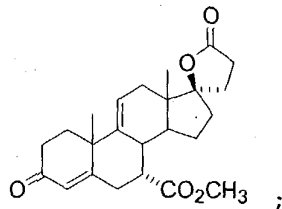
wherein -A-A-, -B-B-, R<sup>1</sup>, R<sup>3</sup>, X, Y<sup>1</sup> and Y<sup>2</sup> are as defined above, and R<sup>2</sup> represents lower alkylsulfonyloxy or acyloxy.

Claim 68. (new) A process as set forth in claim 66 wherein said compound of Formula I is:

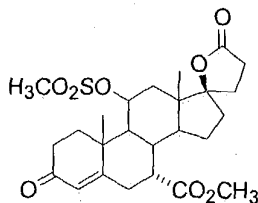




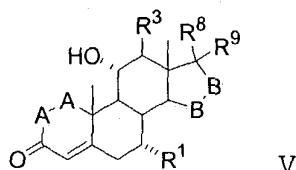
said compound of Formula II is:



and said compound of Formula IV is:



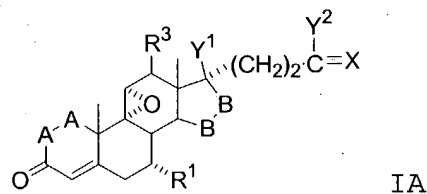
Claim 69. (new) A process as set forth in claim 66 wherein the compound of Formula IV is prepared by reacting a lower alkylsulfonylating or acylating reagent or a halide generating agent with a compound of Formula V:



wherein -A-A-, -B-B-, R<sup>1</sup>, R<sup>3</sup>, R<sup>8</sup> and R<sup>9</sup> are as defined in claim 66.

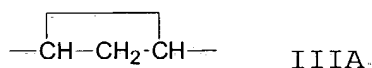
Claim 70. (new) A process as set forth in claim 69 wherein said halide generating agent is selected from the group consisting of thionyl halide, sulfuryl halide, and oxalyl halide.

Claim 71. (new) A process as set forth in claim 69 wherein said compound of Formula I corresponds to Formula IA:



wherein -A-A- represents the group  $-\text{CH}_2-\text{CH}_2-$  or  $-\text{CH}=\text{CH}-$ ;

-B-B- represents the group  $-\text{CH}_2-\text{CH}_2-$  or an alpha- or beta-oriented group of Formula IIIA:



$\text{R}^1$  represents an alpha-oriented lower alkoxycarbonyl radical;

X represents two hydrogen atoms or oxo;

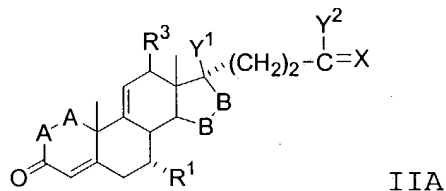
$\text{Y}^1$  and  $\text{Y}^2$  together represent the oxygen bridge  $-\text{O}-$ , or

$\text{Y}^1$  represents hydroxy, and

$\text{Y}^2$  represents hydroxy, lower alkoxy or, if X represents  $\text{H}_2$ , also lower alkanoyloxy;

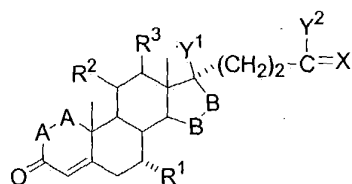
and salts of compounds in which X represents oxo and  $\text{Y}^2$  represents hydroxy;

the process comprising contacting an epoxidizing reagent with a compound of Formula IIA:



wherein -A-A-, -B-B-,  $\text{R}^1$ ,  $\text{R}^3$ , X,  $\text{Y}^1$  and  $\text{Y}^2$  are as defined above;

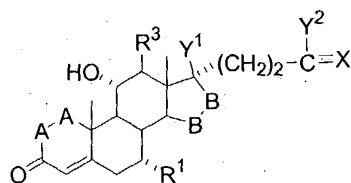
wherein said compound of Formula IIA is formed by contacting a solution comprising a lower alkanolic acid and a salt of a lower alkanolic acid with a compound of Formula IVA:



IVA

wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above, and  $R^2$  represents lower alkylsulfonyloxy or acyloxy;

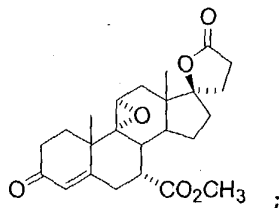
wherein said compound of Formula IVA is formed by reacting a lower alkylsulfonyl or acyl halide in the presence of a hydrogen halide scavenger with a compound of Formula VA:



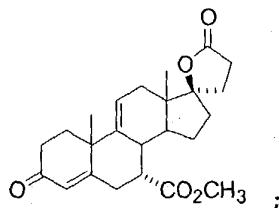
VA

wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above.

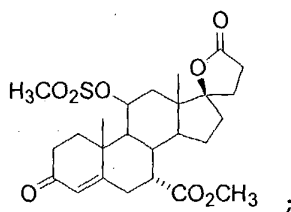
Claim 72. (new) The process of claim 69 wherein said compound of Formula I is:



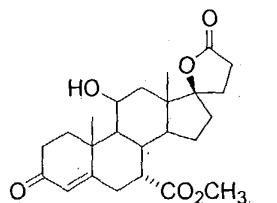
said compound of Formula II is:



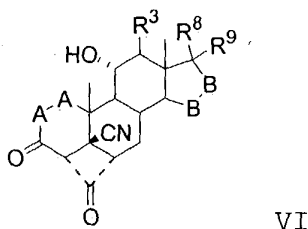
said compound of Formula IV is:



and said compound of Formula V is:

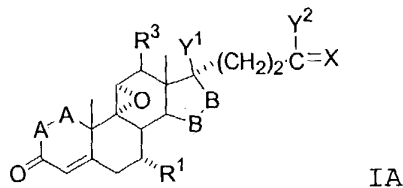


Claim 73. (new) A process as set forth in claim 69 wherein the compound of Formula V is prepared by reacting a compound of Formula VI with an alkali metal alkoxide corresponding to the formula  $\text{R}^{10}\text{OM}$  wherein M is alkali metal and  $\text{R}^{10}\text{O}^-$  corresponds to the alkoxy substituent of  $\text{R}^1$ , said compound of Formula VI having the structure:

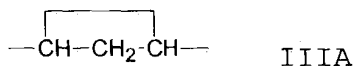


wherein -A-A-, -B-B-,  $\text{R}^3$ ,  $\text{R}^8$  and  $\text{R}^9$  are as defined in claim 69.

Claim 74. (new) A process as set forth in claim 73 wherein said compound of Formula I corresponds to Formula IA:



wherein -A-A- represents the group -CH<sub>2</sub>-CH<sub>2</sub>- or -CH=CH-;  
-B-B- represents the group -CH<sub>2</sub>-CH<sub>2</sub>- or an alpha- or beta-oriented group of Formula IIIA:



R<sup>1</sup> represents an alpha-oriented lower alkoxy carbonyl radical;

X represents two hydrogen atoms or oxo;

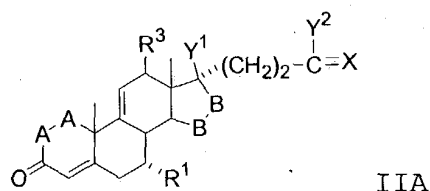
Y<sup>1</sup> and Y<sup>2</sup> together represent the oxygen bridge -O-, or

Y<sup>1</sup> represents hydroxy, and

Y<sup>2</sup> represents hydroxy, lower alkoxy or, if X represents H<sub>2</sub>, also lower alkanoyloxy;

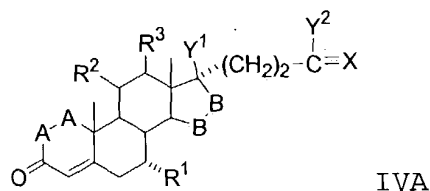
and salts of compounds in which X represents oxo and Y<sup>2</sup> represents hydroxy;

the process comprising contacting an epoxidizing reagent with a compound of Formula IIA:



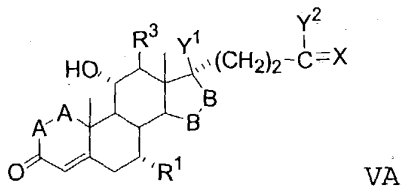
wherein -A-A-, -B-B-, R<sup>1</sup>, R<sup>3</sup>, X, Y<sup>1</sup> and Y<sup>2</sup> are as defined above;

wherein said compound of Formula IIA is formed by contacting a solution comprising a lower alkanolic acid and a salt of a lower alkanolic acid with a compound of Formula IVA:



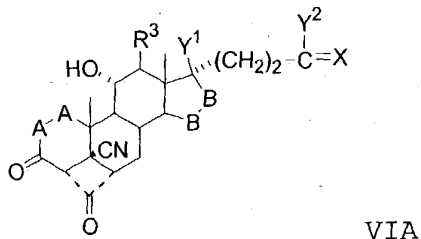
wherein -A-A-, -B-B-, R<sup>1</sup>, R<sup>3</sup>, X, Y<sup>1</sup> and Y<sup>2</sup> are as defined above, and R<sup>2</sup> represents lower alkylsulfonyloxy or acyloxy;

wherein said compound of Formula IVA is formed by reacting a lower alkylsulfonyl or acyl halide in the presence of a hydrogen halide scavenger with a compound of Formula VA:



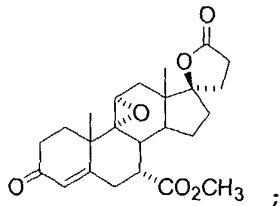
wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above;

wherein said compound of Formula VA is formed by reacting an alkali metal alkoxide corresponding to the formula  $R^{10}OM$  in the presence of an alcohol having the formula  $R^{10}OH$ , wherein M is alkali metal and  $R^{10}O^-$  corresponds to the alkoxy substituent of  $R^1$  with a compound of Formula VIA:

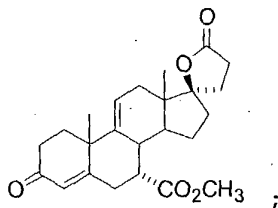


wherein -A-A-, -B-B-,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above.

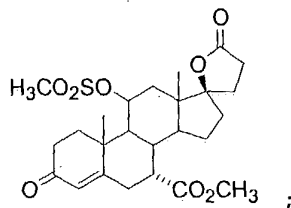
Claim 75. (new) The process of claim 73 wherein said compound of Formula I is:



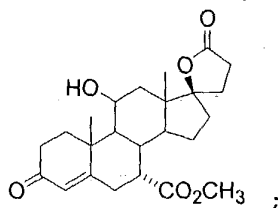
said compound of Formula II is:



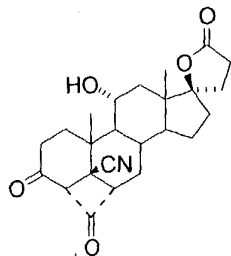
said compound of Formula IV is:



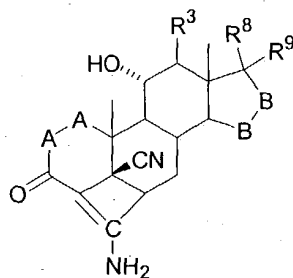
said compound of Formula V is:



and said compound of Formula VI is:



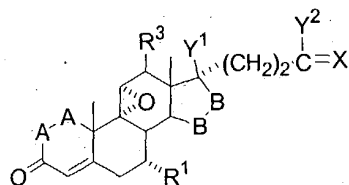
Claim 76. (new) A process as set forth in claim 73 wherein the compound of Formula VI is prepared by hydrolyzing a compound of Formula VII:



VII

wherein -A-A-, -B-B-,  $R^3$ ,  $R^8$  and  $R^9$  are as defined in claim 73.

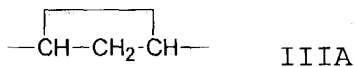
Claim 77. (new) A process as set forth in claim 76 wherein said compound of Formula I corresponds to Formula IA:



IA

wherein -A-A- represents the group  $-CH_2=CH_2-$  or  $-CH=CH-$ ;

-B-B- represents the group  $-CH_2-CH_2-$  or an alpha- or beta-oriented group of Formula IIIA:



IIIA

$R^1$  represents an alpha-oriented lower alkoxycarbonyl radical;

X represents two hydrogen atoms or oxo;

$Y^1$  and  $Y^2$  together represent the oxygen bridge  $-O-$ , or

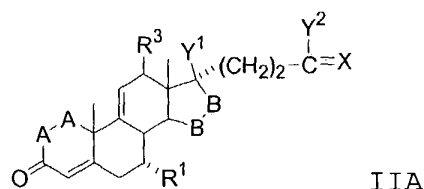
$Y^1$  represents hydroxy, and

$Y^2$  represents hydroxy, lower alkoxy or, if X represents  $H_2$ , also lower alkanoyloxy;

and salts of compounds in which X represents oxo and  $Y^2$  represents hydroxy;

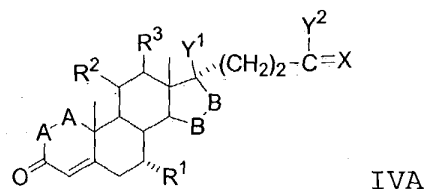
the process comprising contacting an epoxidizing reagent with a compound of Formula IIA:





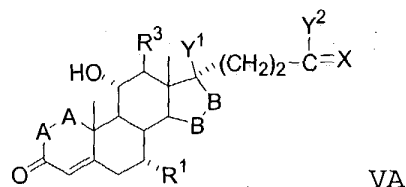
wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above;

wherein said compound of Formula IIA is formed by contacting a solution comprising a lower alkanolic acid and a salt of a lower alkanolic acid with a compound of Formula IVA:



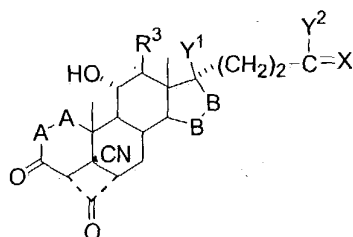
wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above, and  $R^2$  represents lower alkylsulfonyloxy or acyloxy;

wherein said compound of Formula IVA is formed by reacting a lower alkylsulfonyl or acyl halide in the presence of a hydrogen halide scavenger with a compound of Formula VA:



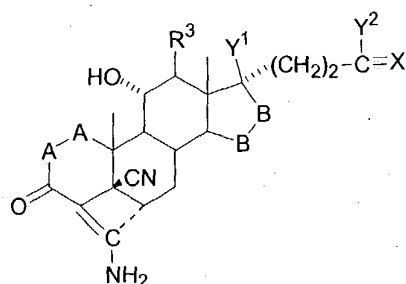
wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above;

wherein said compound of Formula VA is formed by reacting an alkali metal alkoxide corresponding to the formula  $R^{10}OM$  in the presence of an alcohol having the formula  $R^{10}OH$ , wherein M is alkali metal and  $R^{10}O^-$  corresponds to the alkoxy substituent of  $R^1$  with a compound of Formula VIA:



VIA

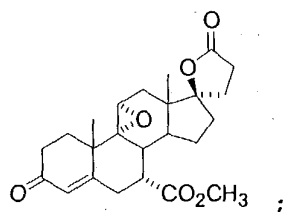
wherein -A-A-, -B-B-,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above;  
wherein said compound of Formula VIA is formed by  
hydrolyzing a compound of Formula VIIA in the presence of an acid  
and an organic solvent and/or water, said compound of Formula  
VIIA having the structure:



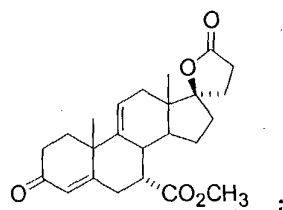
VIIA

wherein -A-A-, -B-B-,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above.

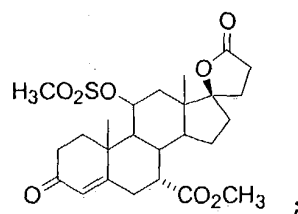
Claim 78. (new) The process of claim 76 wherein said compound of  
Formula I is:



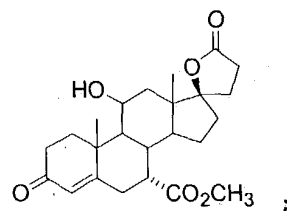
said compound of Formula II is:



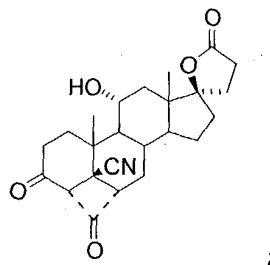
said compound of Formula IV is:



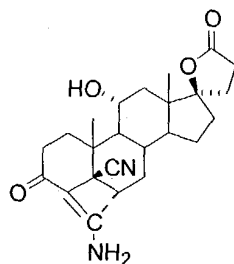
said compound of Formula V is:



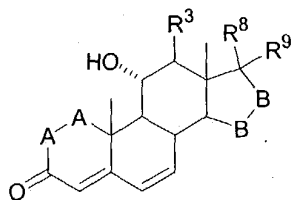
said compound of Formula VI is:



and said compound of Formula VII is:



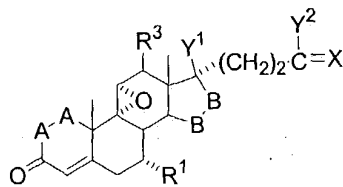
Claim 79. (new) A process as set forth in claim 76 wherein the compound of Formula VII is prepared by reacting a source of cyanide ion in the presence of an alkali metal salt with a compound of Formula VIII:



VIII

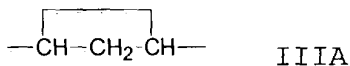
wherein -A-A-, -B-B-, R<sup>3</sup>, R<sup>8</sup> and R<sup>9</sup> are as defined in claim 76.

Claim 80. (new) A process as set forth in claim 79 wherein said compound of Formula I corresponds to Formula IA:



IA

wherein -A-A- represents the group -CH<sub>2</sub>-CH<sub>2</sub>- or -CH=CH-;  
-B-B- represents the group -CH<sub>2</sub>-CH<sub>2</sub>- or an alpha- or beta-oriented group of Formula IIIA:



IIIA

R<sup>1</sup> represents an alpha-oriented lower alkoxy carbonyl radical;

X represents two hydrogen atoms or oxo;

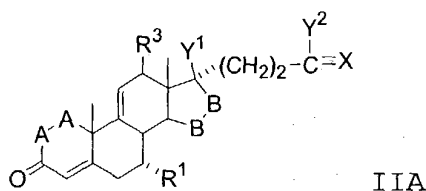
Y<sup>1</sup> and Y<sup>2</sup> together represent the oxygen bridge -O-, or

Y<sup>1</sup> represents hydroxy, and

Y<sup>2</sup> represents hydroxy, lower alkoxy or, if X represents H<sub>2</sub>, also lower alkanoyloxy;

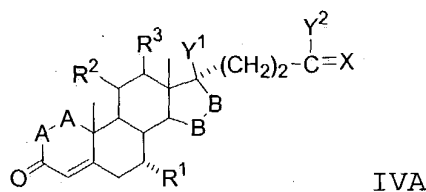
and salts of compounds in which X represents oxo and Y<sup>2</sup> represents hydroxy;

the process comprising contacting an epoxidizing reagent with a compound of Formula IIA:



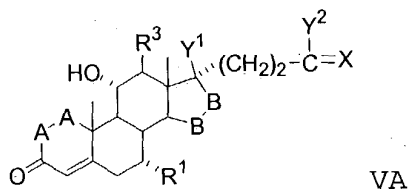
wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above;

wherein said compound of Formula IIA is formed by contacting a solution comprising a lower alkanolic acid and a salt of a lower alkanolic acid with a compound of Formula IVA:



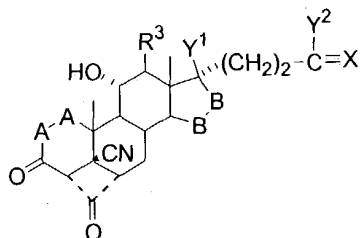
wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above, and  $R^2$  represents lower alkylsulfonyloxy or acyloxy;

wherein said compound of Formula IVA is formed by reacting a lower alkylsulfonyl or acyl halide in the presence of a hydrogen halide scavenger with a compound of Formula VA:



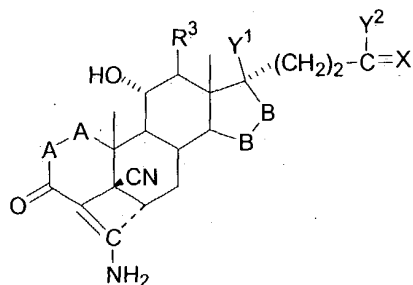
wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above;

wherein said compound of Formula VA is formed by reacting an alkali metal alkoxide corresponding to the formula  $R^{10}OM$  in the presence of an alcohol having the formula  $R^{10}OH$ , wherein M is alkali metal and  $R^{10}O^-$  corresponds to the alkoxy substituent of  $R^1$  with a compound of Formula VIA:



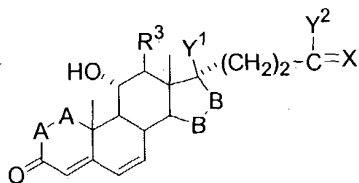
VIA

wherein -A-A-, -B-B-,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above;  
wherein said compound of Formula VIA is formed by  
hydrolyzing a compound of Formula VIIA in the presence of an acid  
and an organic solvent and/or water, said compound of Formula  
VIIA having the structure:



VIIA

wherein -A-A-, -B-B-,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above;  
wherein said compound of Formula VIIA is formed by reacting  
a cyanide source in the presence of LiCl in the presence of a  
base with an 11 $\alpha$ -hydroxy compound of Formula VIIIA:

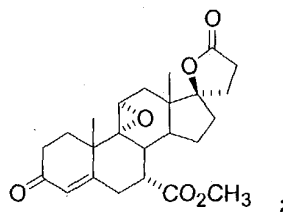


VIIIA

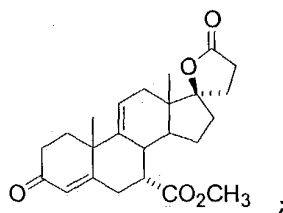
wherein -A-A-, -B-B-,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above.

Claim 81. (new) A process according to claim 80 wherein said  
cyanide source is ketone cyanohydrin.

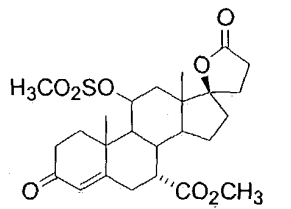
Claim 82. (new) A process as set forth in claim 79 wherein said  
compound of Formula I is:



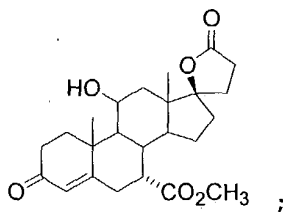
said compound of Formula II is:



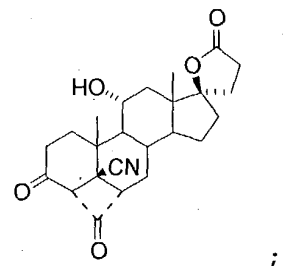
said compound of Formula IV is:



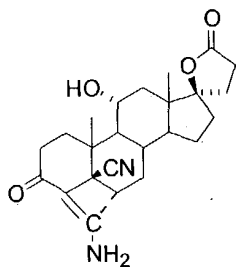
said compound of Formula V is:



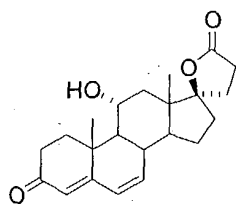
said compound of Formula VI is:



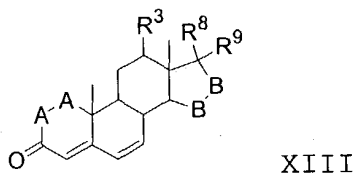
said compound of Formula VII is:



and said compound of Formula VIII is:

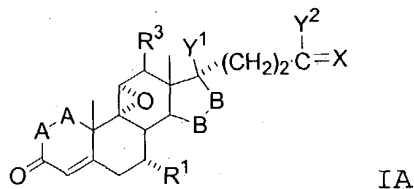


Claim 83. (new) A process as set forth in claim 79 wherein the compound of Formula VIII is prepared by oxidizing a compound of Formula XIII by fermentation in the presence of a microorganism effective for introducing an 11-hydroxy group into said substrate in  $\alpha$ -orientation, said compound of Formula XIII having the structure:



wherein -A-A-, -B-B-, R<sup>3</sup>, R<sup>8</sup> and R<sup>9</sup> are as defined in claim 79.

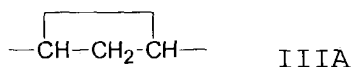
Claim 84. (new) A process as set forth in claim 83 wherein said compound of Formula I corresponds to Formula IA:



wherein -A-A- represents the group -CH<sub>2</sub>-CH<sub>2</sub>- or -CH=CH-;



-B-B- represents the group -CH<sub>2</sub>-CH<sub>2</sub>- or an alpha- or beta-oriented group of Formula IIIA:



R<sup>1</sup> represents an alpha-oriented lower alkoxycarbonyl radical;

X represents two hydrogen atoms or oxo;

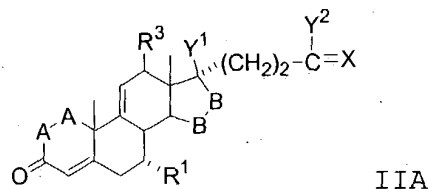
Y<sup>1</sup> and Y<sup>2</sup> together represent the oxygen bridge -O-, or

Y<sup>1</sup> represents hydroxy, and

Y<sup>2</sup> represents hydroxy, lower alkoxy or, if X represents H<sub>2</sub>, also lower alkanoyloxy;

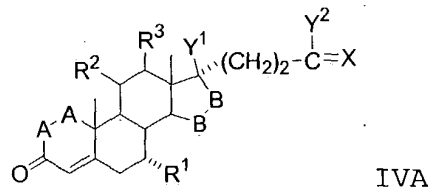
and salts of compounds in which X represents oxo and Y<sup>2</sup> represents hydroxy;

the process comprising contacting an epoxidizing reagent with a compound of Formula IIA:



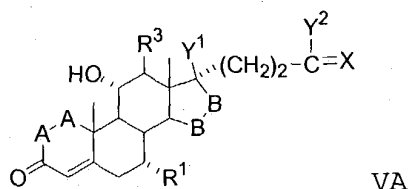
wherein -A-A-, -B-B-, R<sup>1</sup>, R<sup>3</sup>, X, Y<sup>1</sup> and Y<sup>2</sup> are as defined above;

wherein said compound of Formula IIA is formed by contacting a solution comprising a lower alkanolic acid and a salt of a lower alkanolic acid with a compound of Formula IVA:



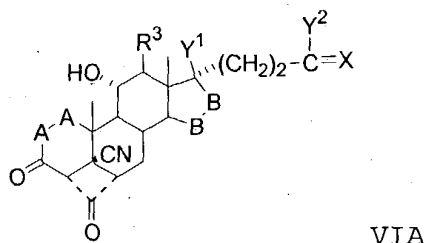
wherein -A-A-, -B-B-, R<sup>1</sup>, R<sup>3</sup>, X, Y<sup>1</sup> and Y<sup>2</sup> are as defined above, and R<sup>2</sup> represents lower alkylsulfonyloxy or acyloxy;

wherein said compound of Formula IVA is formed by reacting a lower alkylsulfonyl or acyl halide in the presence of a hydrogen halide scavenger with a compound of Formula VA:



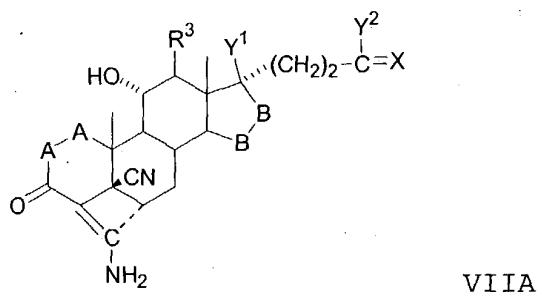
wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above;

wherein said compound of Formula VA is formed by reacting an alkali metal alkoxide corresponding to the formula  $R^{10}OM$  in the presence of an alcohol having the formula  $R^{10}OH$ , wherein M is alkali metal and  $R^{10}O^-$  corresponds to the alkoxy substituent of  $R^1$  with a compound of Formula VIA:



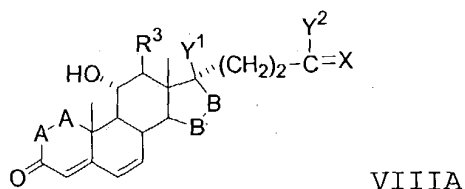
wherein -A-A-, -B-B-,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above;

wherein said compound of Formula VIA is formed by hydrolyzing a compound of Formula VIIA in the presence of an acid and an organic solvent and/or water, said compound of Formula VIIA having the structure:



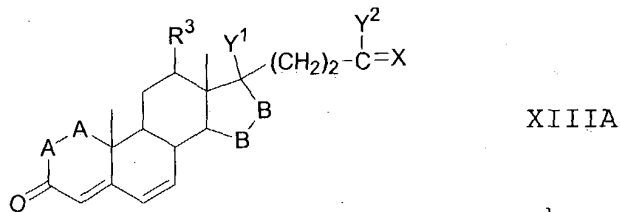
wherein -A-A-, -B-B-,  $R^3$ , X,  $Y^1$  and  $Y^2$  are as defined above;

wherein said compound of Formula VIIA is formed by reacting a cyanide source in the presence of LiCl in the presence of a base with an 11 $\alpha$ -hydroxy compound of Formula VIIIA:



wherein -A-A-, -B-B-, R<sup>3</sup>, X, Y<sup>1</sup> and Y<sup>2</sup> are as defined above;

wherein said compound of Formula VIIIA is formed by oxidizing a compound of Formula XIII A by fermentation in the presence of a microorganism effective for introducing an 11-hydroxy group into said substrate in  $\alpha$ -orientation, said compound of Formula XIII A having the structure:

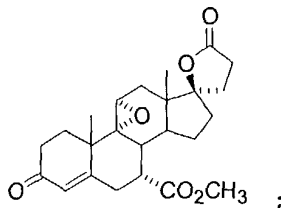


wherein -A-A-,

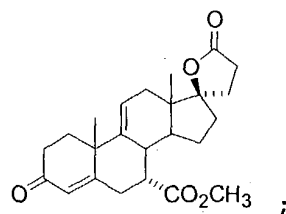
-B-B-, R<sup>3</sup>, X, Y<sup>1</sup> and Y<sup>2</sup> are as defined above.

Claim 85. (new) A process as set forth in claim 84 wherein said cyanide source is ketone cyanohydrin.

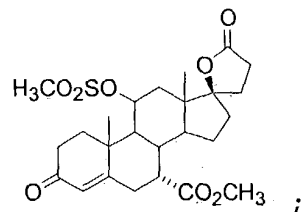
Claim 86. (new) A process as set forth in claim 83 wherein said compound of Formula I is:



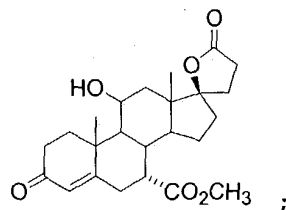
said compound of Formula II is:



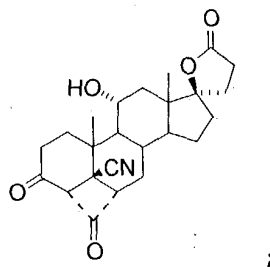
said compound of Formula IV is:



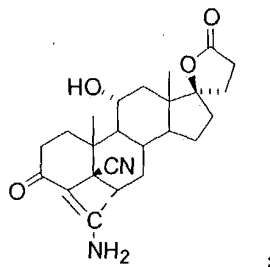
said compound of Formula V is:



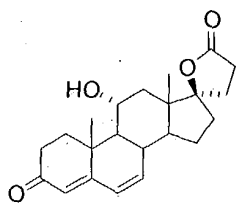
said compound of Formula VI is:



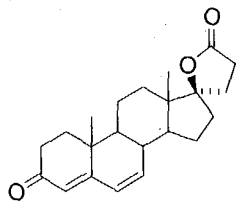
said compound of Formula VII is:



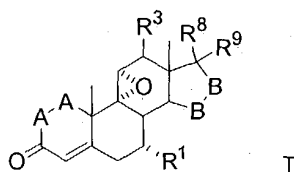
said compound of Formula VIII is:



and said compound of Formula XIII is:



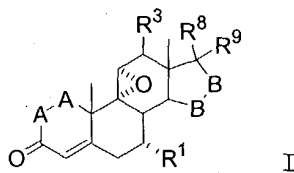
Claim 87. (new) A compound of Formula I



said compound of Formula I prepared according to the process of claim 66;

wherein -A-A-, -B-B-, R<sup>1</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, and R<sup>9</sup> are as defined in claim 66.

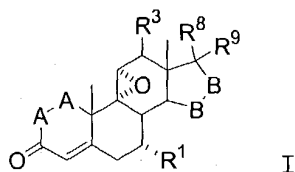
Claim 88. (new) A compound of Formula I



said compound of Formula I prepared according to the process of claim 69;

wherein -A-A-, -B-B-, R<sup>1</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, and R<sup>9</sup> are as defined in claim 69.

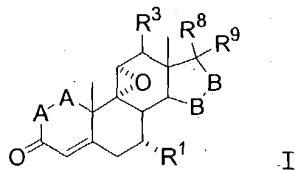
Claim 89. (new) A compound of Formula I



said compound of Formula I prepared according to the process of claim 73;

wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $R^7$ ,  $R^8$ , and  $R^9$  are as defined in claim 73.

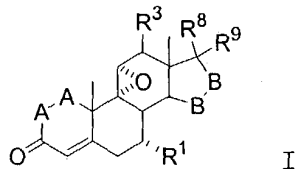
Claim 90. (new) A compound of Formula I



said compound of Formula I prepared according to the process of claim 76;

wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $R^7$ ,  $R^8$ , and  $R^9$  are as defined in claim 76.

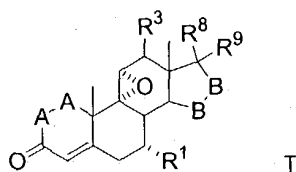
Claim 91. (new) A compound of Formula I



said compound of Formula I prepared according to the process of claim 79;

wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $R^7$ ,  $R^8$ , and  $R^9$  are as defined in claim 79.

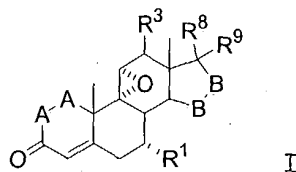
Claim 92. (new) A compound of Formula I



said compound of Formula I prepared according to the process of claim 83;

wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $R^7$ ,  $R^8$ , and  $R^9$  are as defined in claim 83.

Claim 93. (new) A compound of Formula I



said compound of Formula I prepared according to the process of claim 87;

wherein -A-A-, -B-B-,  $R^1$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $R^7$ ,  $R^8$ , and  $R^9$  are as defined in claim 87.